

CLAIMS

- 1 1. A cable system comprising:
2 a cable having a conductor, a power layer and dielectric material, the dielectric
3 layer being located at least partially between the conductor and the power layer, the
4 conductor being operative to carry a signal, the power layer being operative as ground,
5 the power layer being formed of a conductive material and having a first region and an
6 adjacent second region, the first region including a greater amount of the conductive
7 material than the second region such that the power layer is less resistant to bending
8 along the second region than along the first region.
- 1 2. The cable system of claim 1, wherein the second region includes a void that
2 lacks the conductive material.
- 1 3. The cable system of claim 2, wherein at least a portion of the dielectric
2 material is located within the void.
- 1 4. The cable system of claim 1, wherein the second region includes a recess
2 defining an area of reduced thickness of the power layer.
- 1 5. The cable system of claim 1, wherein:
2 the cable has a longitudinal axis; and
3 the second region defines an axial-region bending about which the power layer
4 is less resistant to bending, the axial-bending region being angularly displaced with
5 respect to the longitudinal axis of the cable.

1 6. The cable system of claim 1, wherein the conductor has a first end and a
 2 second end; and
 3 further comprising:
 4 a first connector electrically communicating with the first end of the
 5 conductor; and
 6 a second connector electrically communicating with the second end of the
 7 conductor.

1 7. The cable system of claim 1, wherein the power layer is formed of interwoven
 2 strips of the conductive material.

1 8. The cable system of claim 7, wherein:
 2 the power layer includes a first strip and a second strip of the conductive
 3 material; and
 4 the first region is defined at a location where the first strip and the second strip
 5 overlap each other.

1 9. A cable system comprising:
 2 a cable having a power layer operative as ground, the power layer being
 3 formed of a conductive material and including multiple first locations and multiple
 4 second locations, each of the first locations including an amount of conductive
 5 material greater than an amount of conductive material included in the each of the
 6 second locations such that the power layer is more resistant to bending at the first
 7 locations than at the second locations.

1 10. The cable system of claim 9, wherein:
 2 the cable has a first region including multiple ones of the first locations and a
 3 second region including multiple ones of the second locations; and
 4 the power layer is more resistant to bending along the first region than along
 5 the second region.

1 11. The cable system of claim 10, wherein at least one of the second locations of
 2 the second region is a void that lacks conductive material.

1 12. The cable system of claim 11, wherein:
 2 the cable has a longitudinal axis; and
 3 the second region defines an axial-bending region about which the power layer
 4 is configured to bend, the axial-bending region being angularly displaced with respect
 5 to the longitudinal axis of the cable.

1 13. The cable system of claim 9, further comprising:
 2 a conductor, spaced from the power layer and operative to propagate a signal.

1 14. The cable system of claim 9, wherein the power layer is formed of interwoven
 2 strips of the conductive material.

1 15. The cable system of claim 9, wherein the power layer is generally planar.

1 16. A cable system comprising:
2 a flex cable having means for enabling the flex cable to bend preferentially
3 along an axial-bending region, the axial-bending region being offset with respect to a
4 longitudinal axis of the flex cable.

1 17. The cable system of claim 16, wherein the flex cable has a first end and a
2 second end; and
3 further comprising:
4 first means for enabling the first end of the flex cable to electrically
5 communicate with a component; and
6 second means for enabling the second end of the flex cable to electrically
7 communicate with a component.

1 18. A method for forming a cable system comprising:
2 providing a power layer including at least a first region of reduced material
3 content; and
4 forming a flex cable with the power layer.

1 19. The method of claim 18, wherein providing a power layer comprises forming
2 voids in the first region.

1 20. The method of claim 18, wherein providing a power layer comprises forming
2 recesses in the first region.

- 1 21. A method for electrically interconnecting components comprising:
2 providing a flex cable having a power layer that includes at least a first region
3 of reduced material content;
4 providing a first component and a second component that are to be electrically
5 interconnected to each other; and
6 electrically interconnecting the first component and the second component
7 with the flex cable.